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Comer et al.

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(54) **APPARATUS AND METHOD FOR AN ANGLED ENDGATE**

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(21) Appl. No.: **13/422,482**

(22) Filed: **Mar. 16, 2012**

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E04G 9/10 (2006.01)
E01C 19/48 (2006.01)

(52) **U.S. Cl.**
CPC ***E01C 19/4886*** (2013.01); ***E01C 19/48*** (2013.01)
USPC **404/104**; 404/75; 404/96; 404/118

(58) **Field of Classification Search**
CPC E01C 19/48; E01C 2301/20
USPC 404/72, 75, 96, 102, 104, 114, 118
See application file for complete search history.

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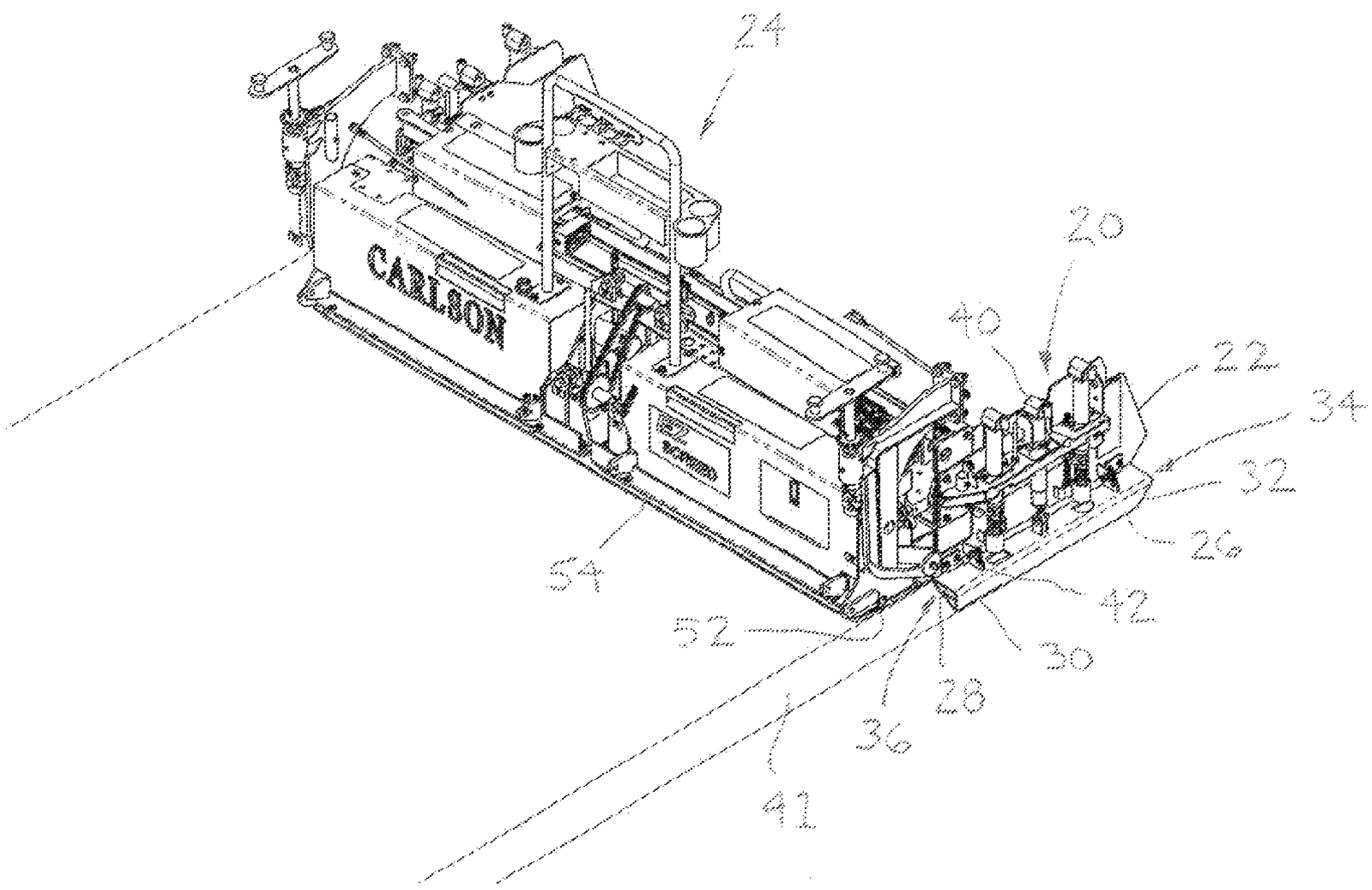
(57) **ABSTRACT**

An angled endgate assembly adapted to produce an edge on an asphalt mat. The preferred angled endgate assembly comprises a frame that is adapted to be attached to an item of asphalt paving equipment. The preferred angled endgate assembly also comprises an edger assembly that is attached to the frame and has an asphalt contacting surface. The preferred asphalt contacting surface tapers from a minimal compaction portion to a maximum compaction portion. The preferred angled endgate further comprises a means for moving the edger assembly relative to the frame. The method of the invention comprises providing an angled endgate assembly adapted to produce an edge on an asphalt mat. The method also comprises compacting the edge of the asphalt mat.

20 Claims, 10 Drawing Sheets



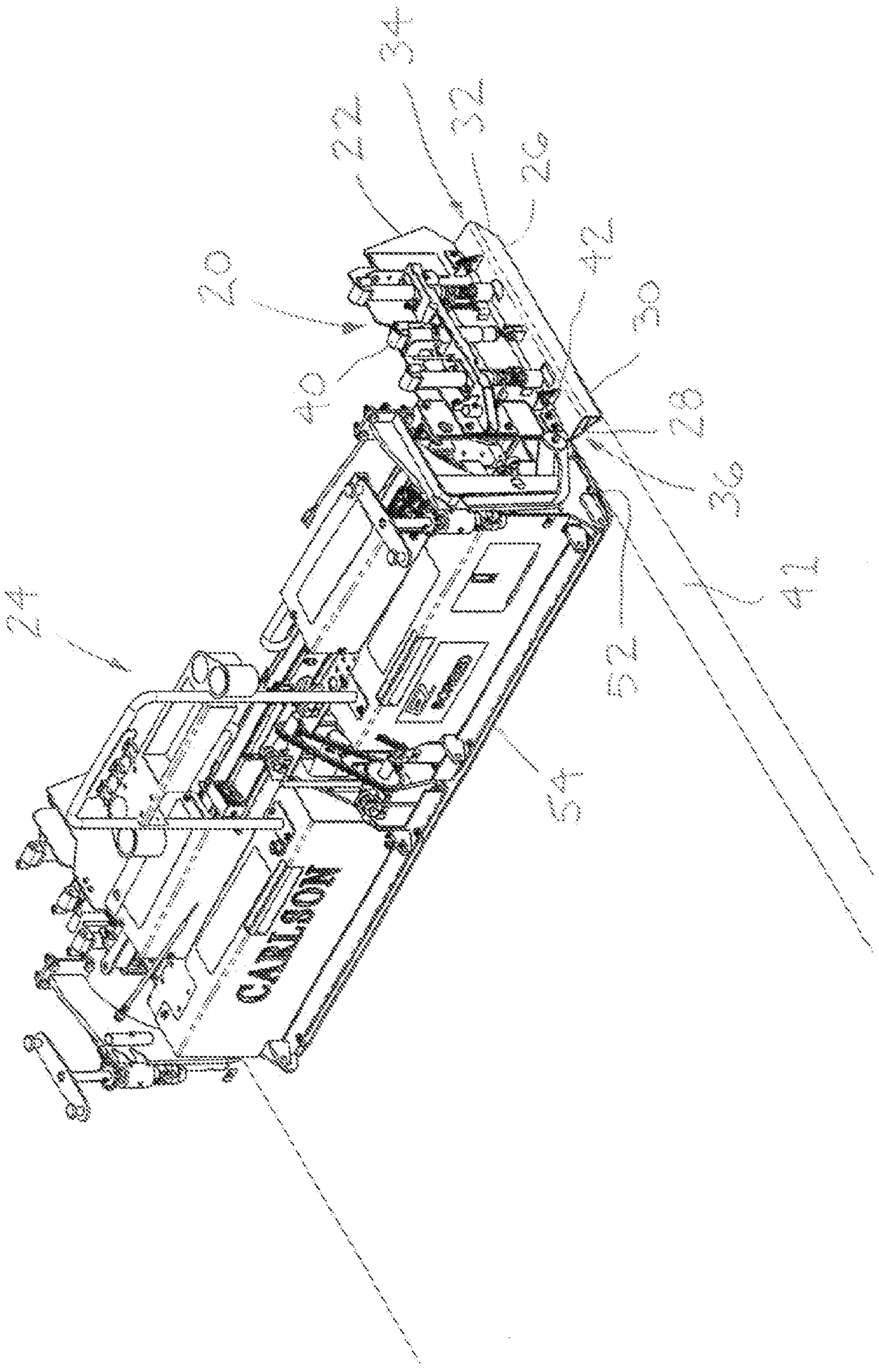


FIGURE 1

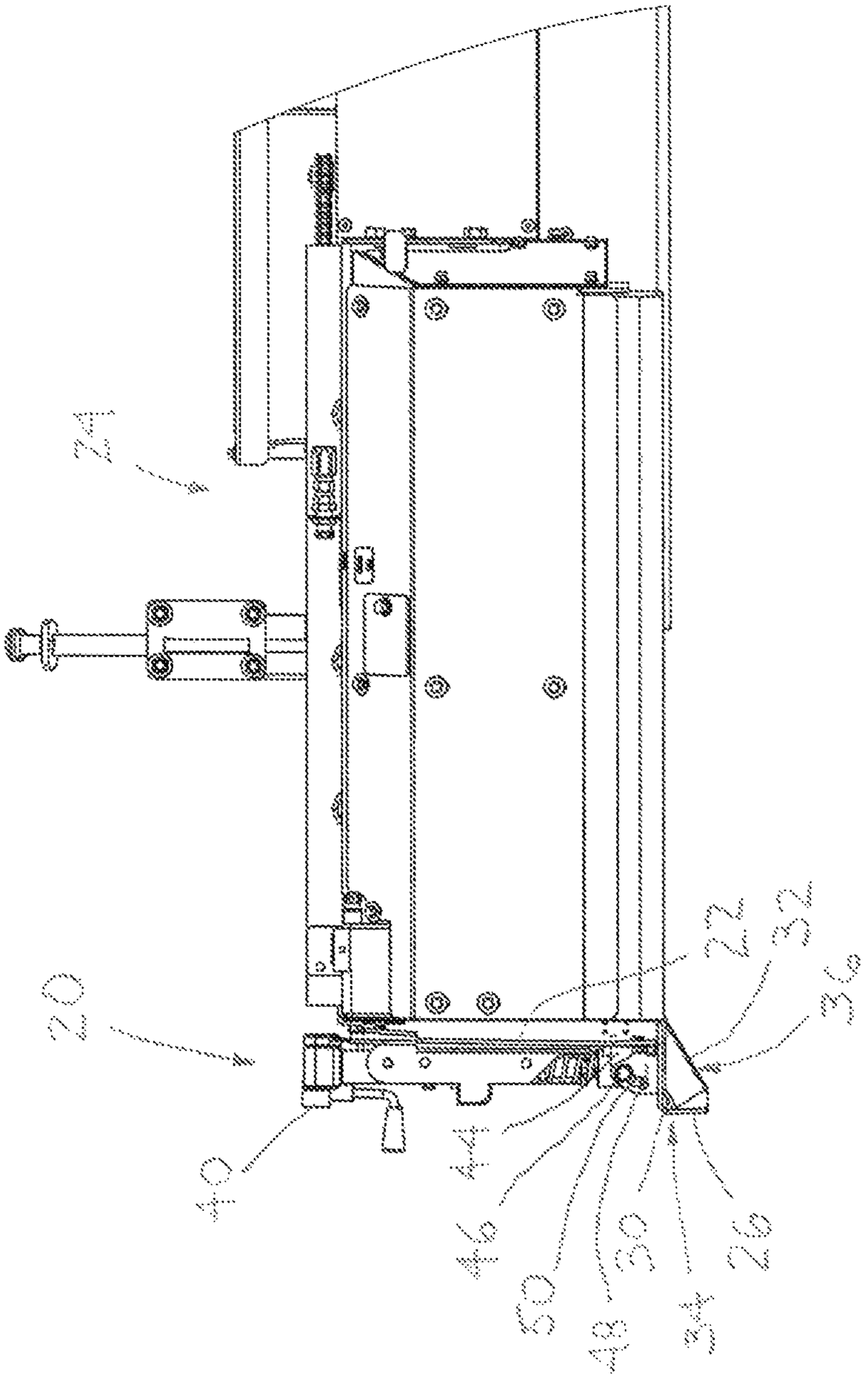


FIGURE 2

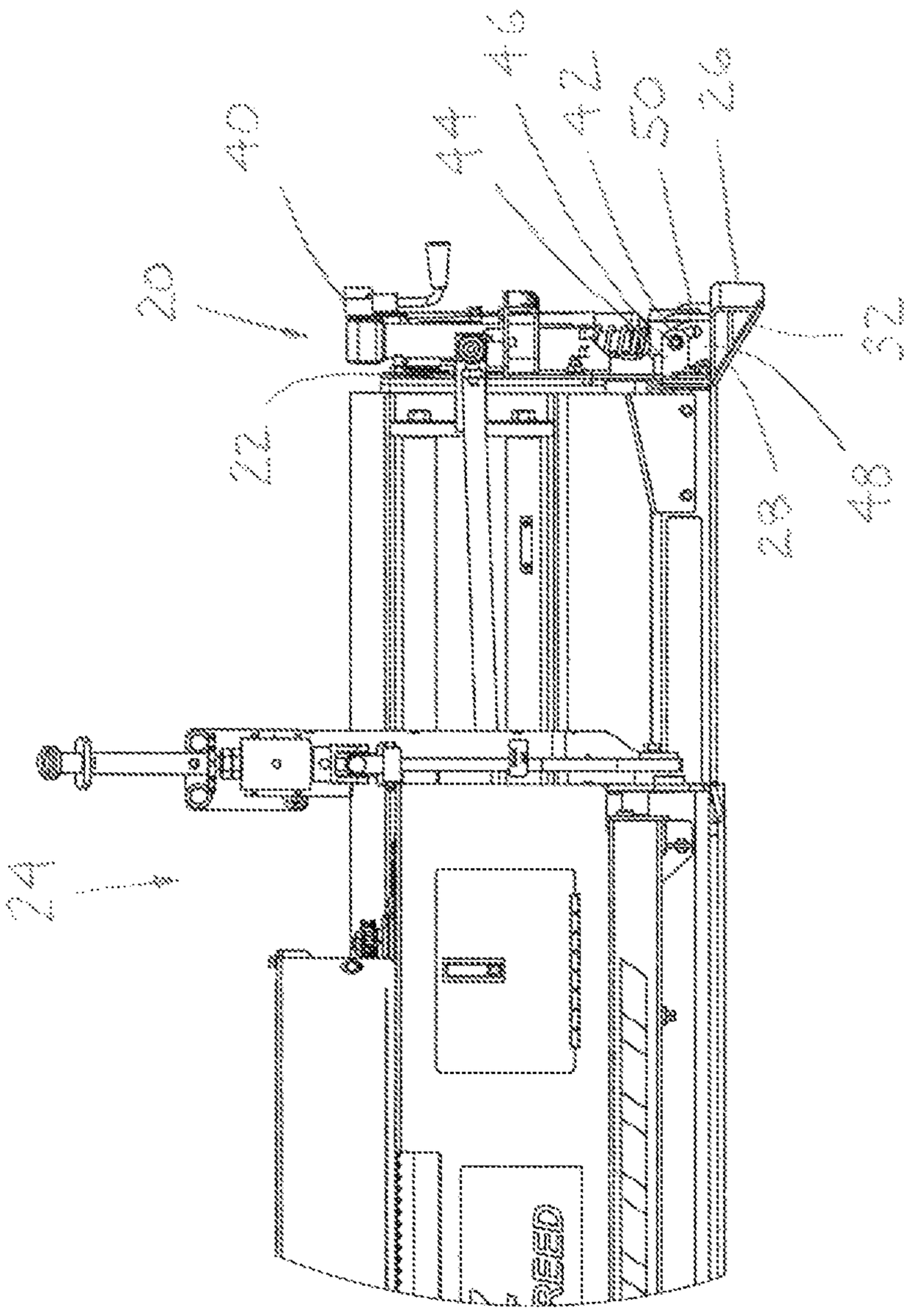


FIGURE 3

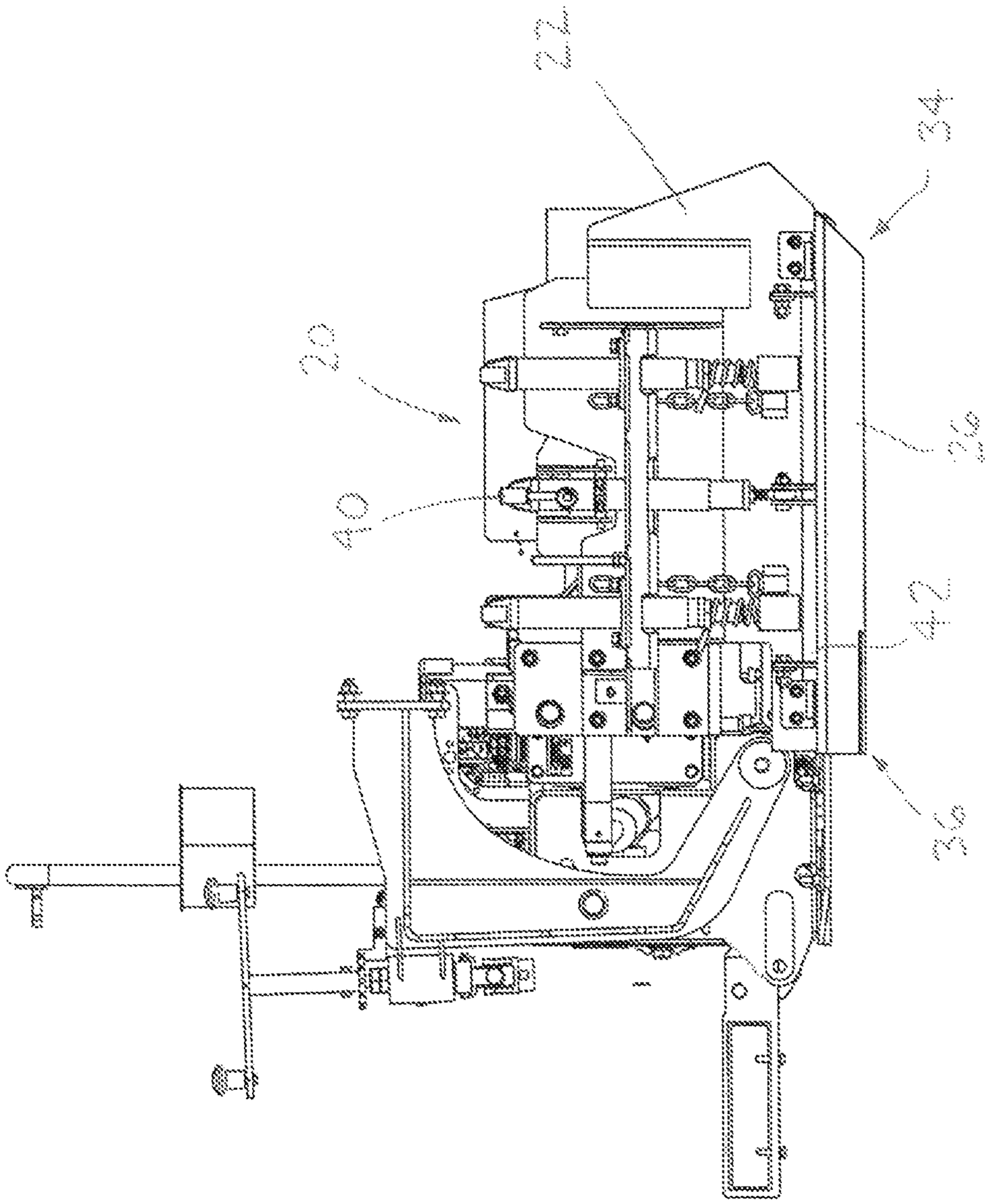


FIGURE 4

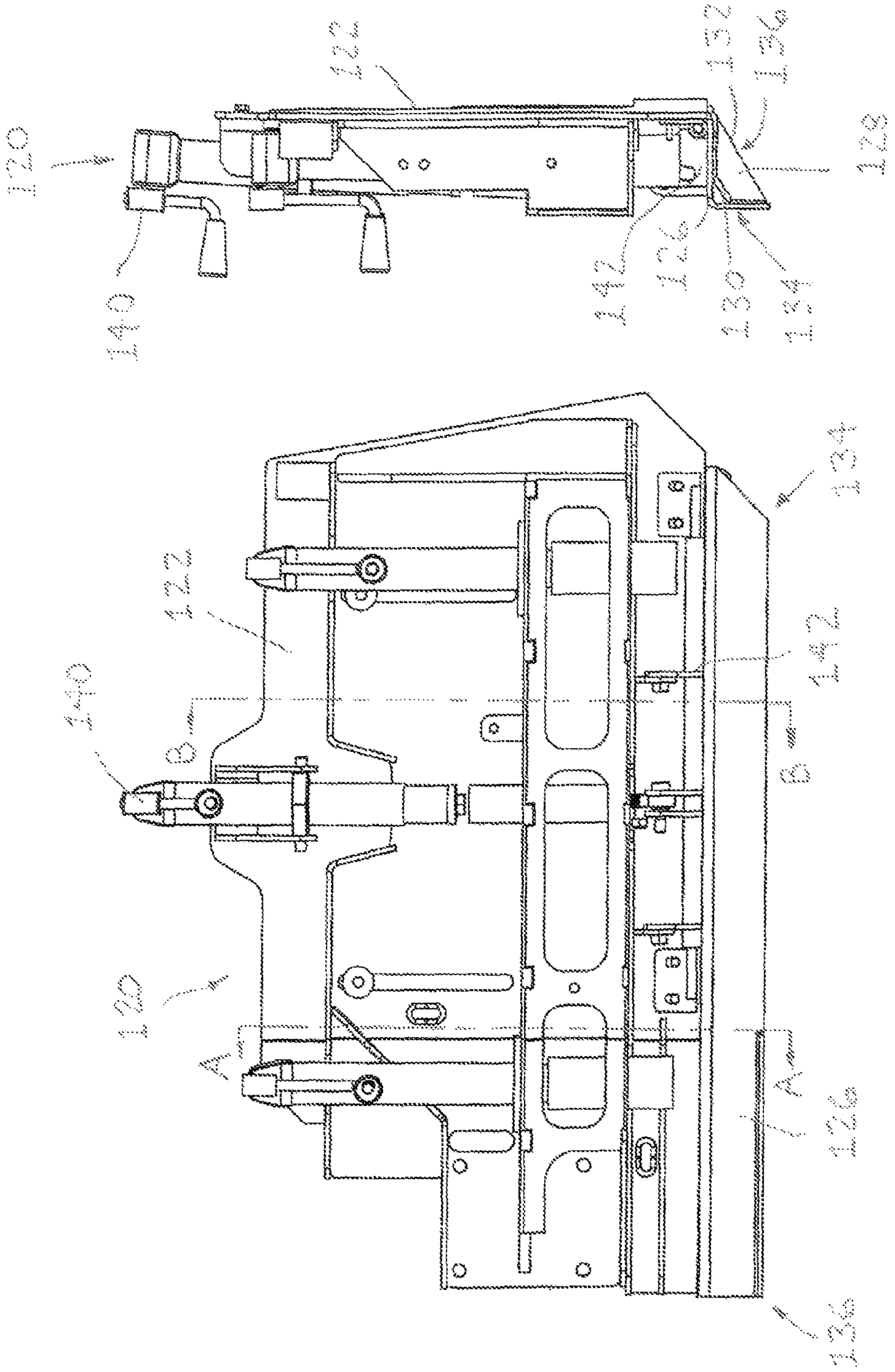


FIGURE 6

FIGURE 5

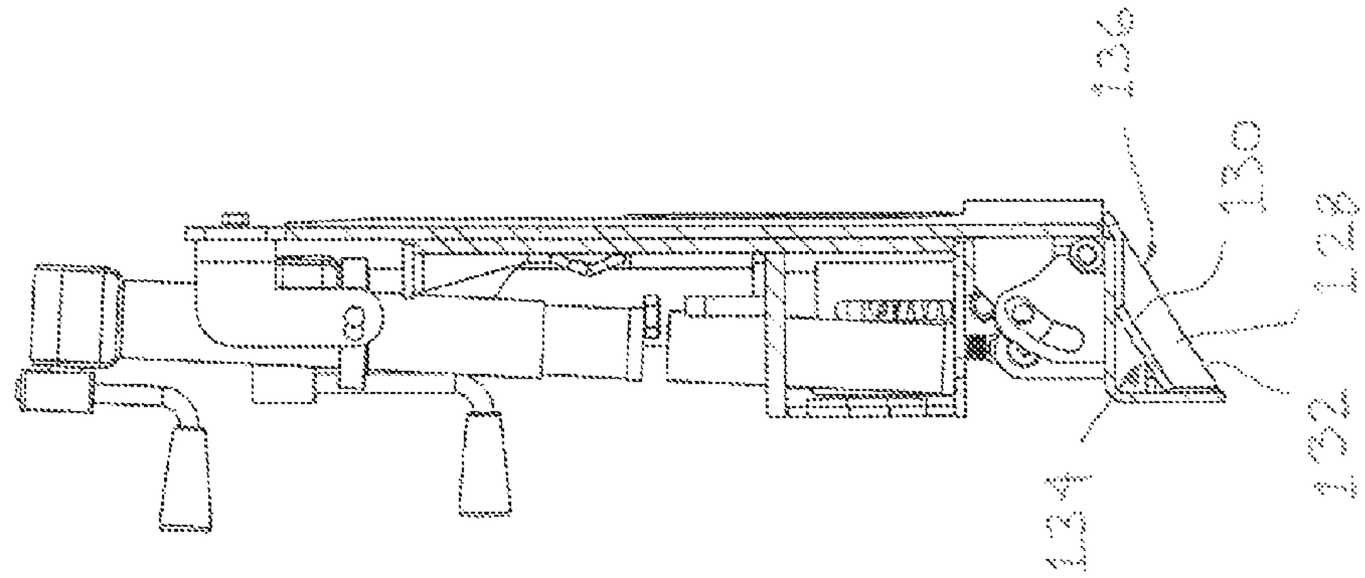


FIGURE 8

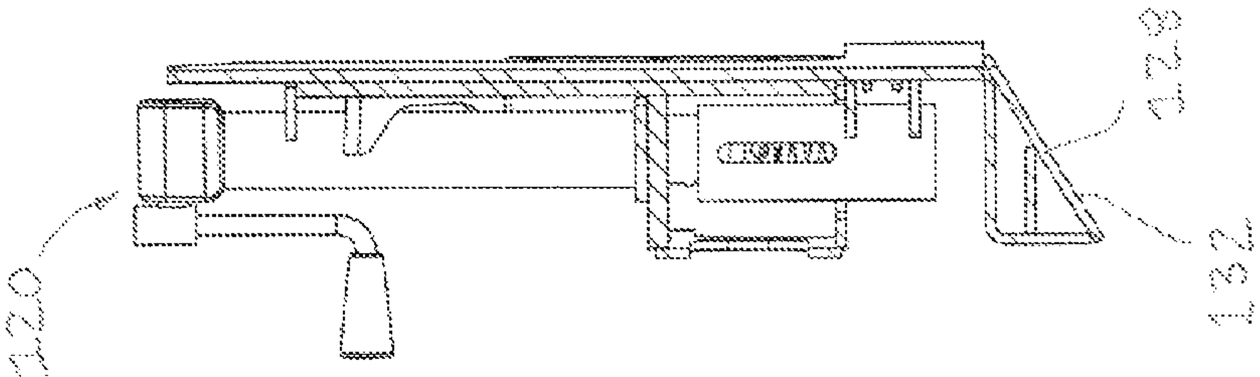


FIGURE 7

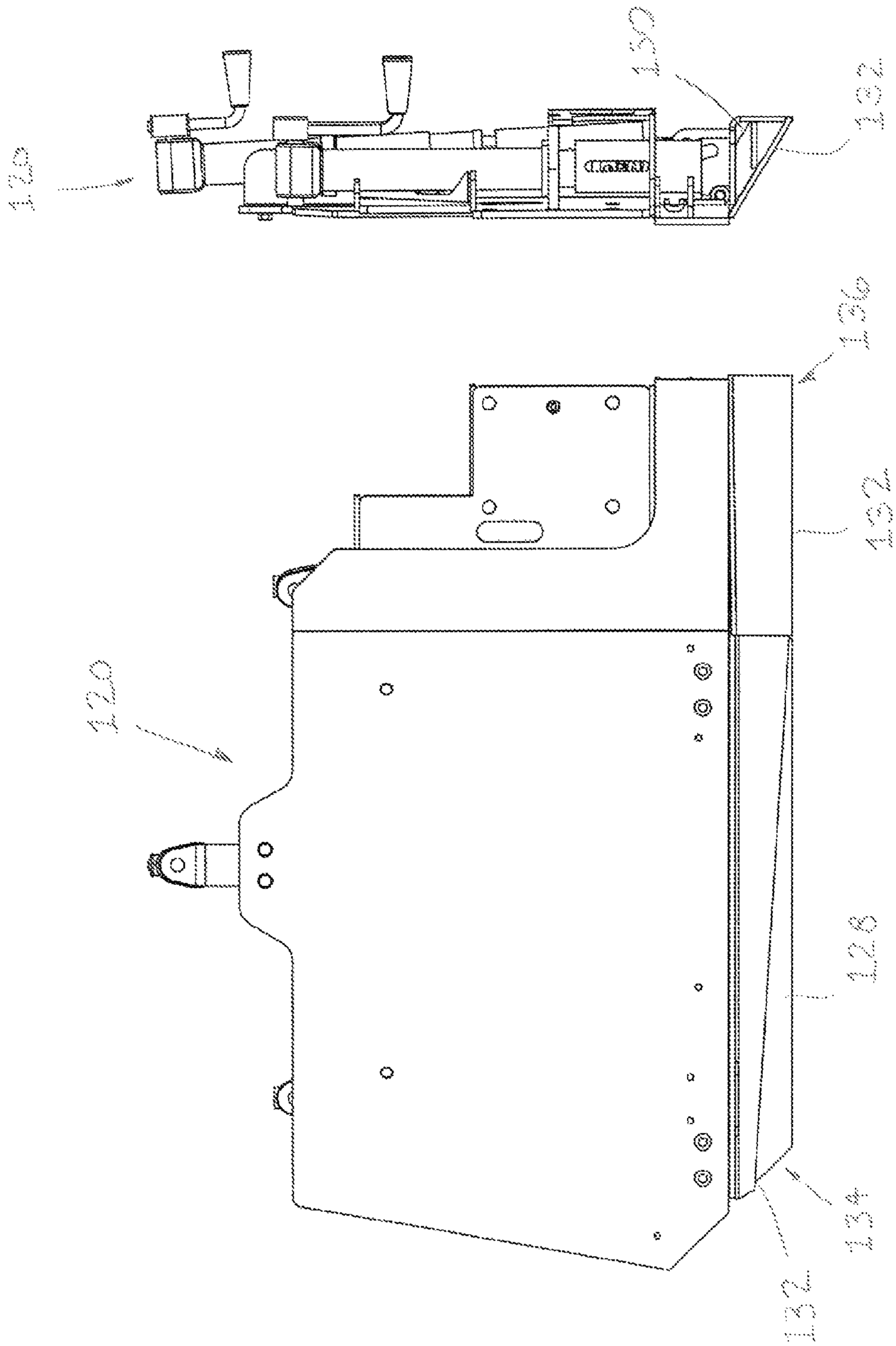


FIGURE 9

FIGURE 10

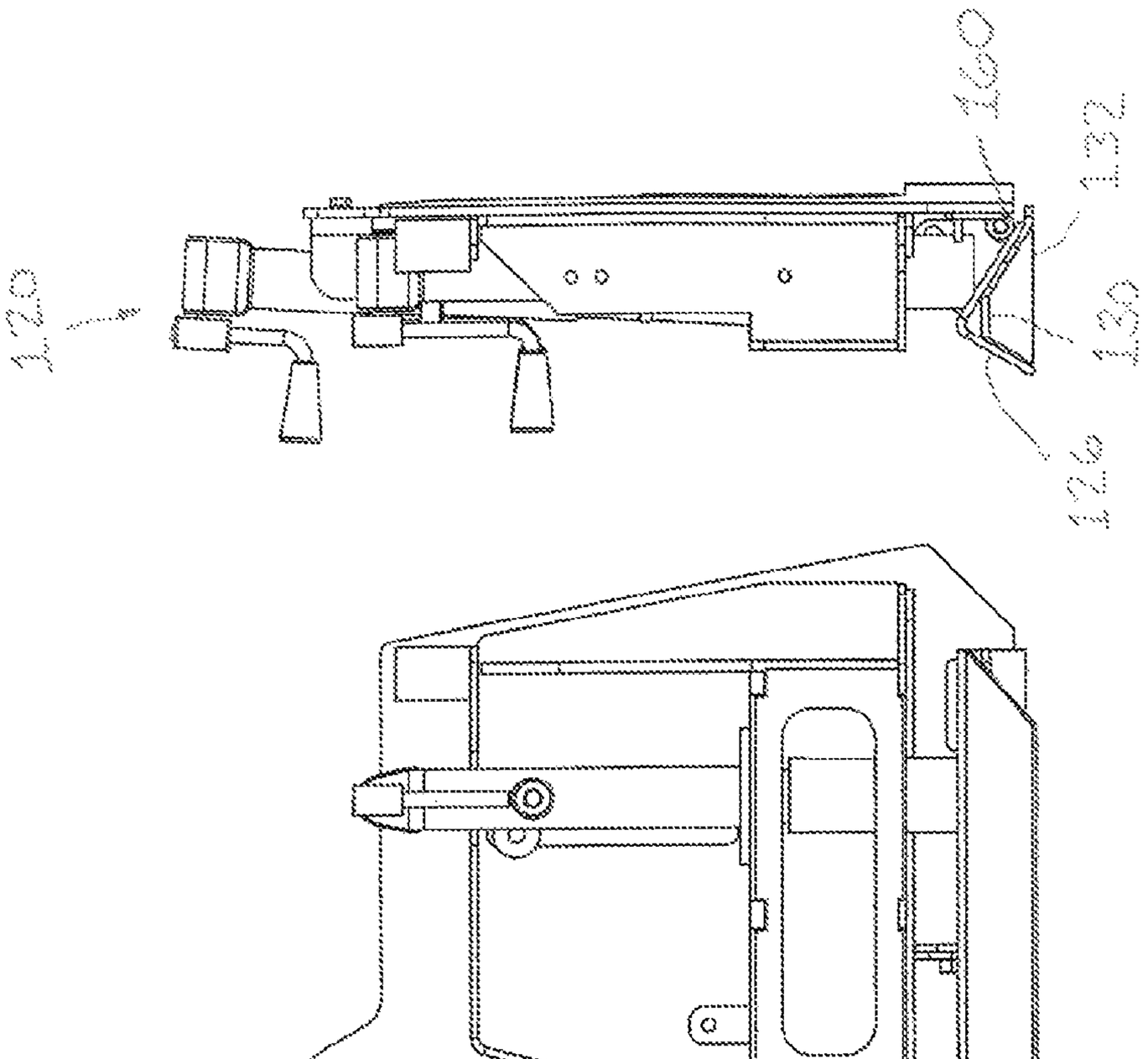


FIGURE 11

FIGURE 12

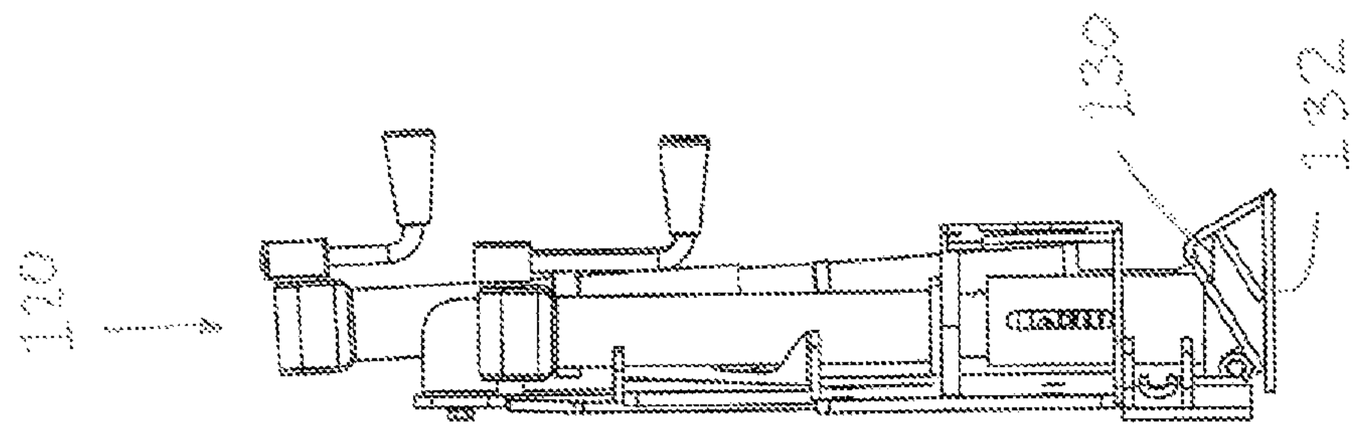


FIGURE 14

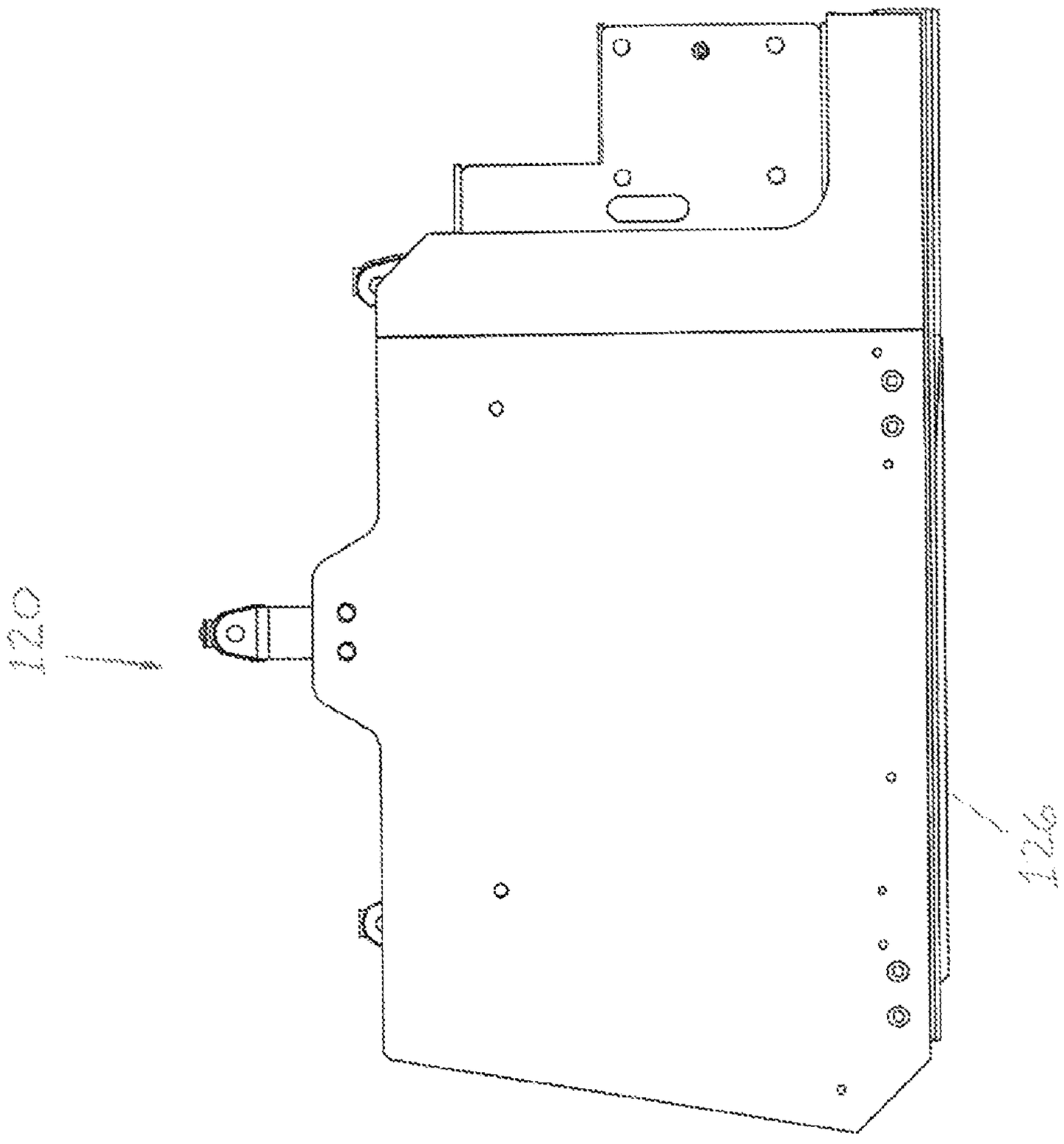


FIGURE 13

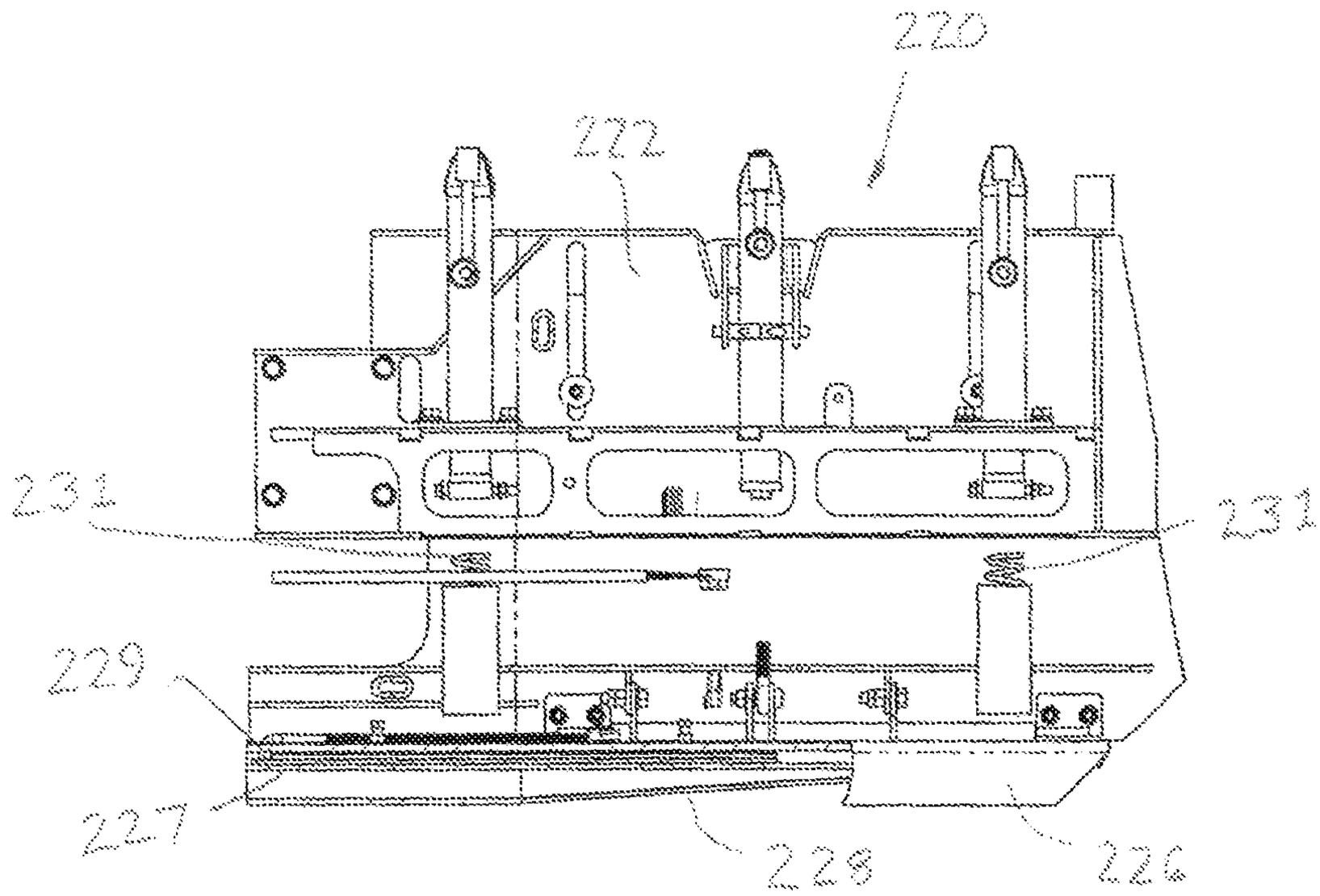


FIGURE 15

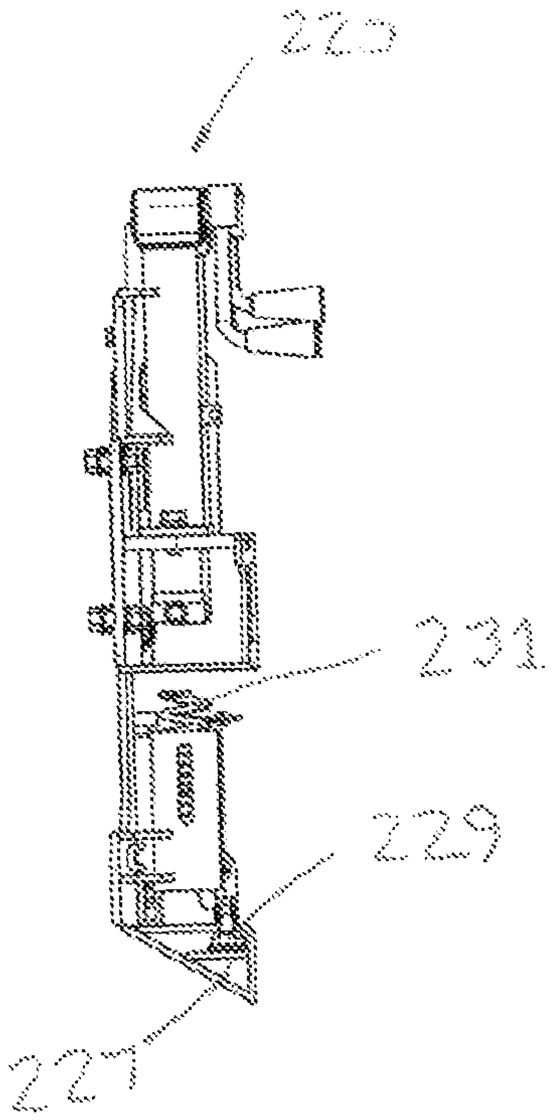


FIGURE 16

APPARATUS AND METHOD FOR AN ANGLED ENDGATE

CROSS-REFERENCES TO RELATED APPLICATIONS/PATENTS

This application relates back to and claims priority from U.S. Provisional Application Patent No. 61/465,214 titled "Apparatus and Method for an Angled Endgate" and filed on Mar. 16, 2011.

FIELD OF THE INVENTION

The present invention relates generally to asphalt paving equipment and particularly to endgates for asphalt paving equipment.

BACKGROUND AND DESCRIPTION OF THE PRIOR ART

It is known to provide asphalt paving equipment with an endgate adapted to form the outer edge of an asphalt mat. Conventional endgates, however, suffer from one or more disadvantages. For example, conventional endgates are not adapted to provide an angled or sloped outer edge to an asphalt mat. Conventional endgates are also bolted to the front of a screed assembly. In addition, conventional endgates are not adjustable or spring-loaded. Further, conventional endgates do not include heating elements. Still further, conventional endgates do not sufficiently compact the edge of an asphalt mat such that the edge requires subsequent compaction. Conventional endgates are disposed in front of the screed plate and not outside the width of the screed plate, and therefore the screed plate alters the edge produced by conventional endgates.

It would be desirable, therefore, if an apparatus and method could be provided for an angled endgate assembly adapted to provide an angled outer edge to an asphalt mat. It would also be desirable if such an apparatus and method could be provided that is integrated into a screed assembly. It would be further desirable if such an apparatus and method could be provided that is adjustable while in operation and spring-loaded. It would be still further desirable if such an apparatus and method could be provided that has a heating element. It would also be desirable if such an apparatus and method could be provided that sufficiently compacts the edge of an asphalt mat. It would be further desirable if such an apparatus and method could be provided that is located outside the width of the screed plate on a screed assembly so that the screed plate does not alter the edge produced by the angled endgate assembly.

ADVANTAGES OF THE PREFERRED EMBODIMENTS OF THE INVENTION

Accordingly, it is an advantage of the preferred embodiments of the invention claimed herein to provide an apparatus and method for an angled endgate assembly adapted to provide an angled outer edge to an asphalt mat. It is also an advantage of the preferred embodiments of the invention claimed herein to provide an apparatus and method for an angled endgate assembly that may be integrated into a screed assembly. It is a further advantage of the preferred embodiments of the invention claimed herein to provide an apparatus and method for an angled endgate assembly that is adjustable (by mechanical jack, linear actuator, cylinder and/or the like) while in operation and spring-loaded. It is a still further advantage of the preferred embodiments of the invention claimed herein to provide an apparatus and method for an angled endgate assembly having a heating element. It is also an advantage of the preferred embodiments of the invention claimed herein to provide an apparatus and method for an angled endgate assembly that sufficiently compacts the edge of an asphalt mat without requiring subsequent compaction. It is another advantage of the preferred embodiments of the invention claimed herein to provide an apparatus and method for an angled endgate assembly that is provided outside the width of the screed plate so that the screed plate does not alter the edge produced by the angled endgate assembly.

Additional advantages of the preferred embodiments of the invention will become apparent from an examination of the drawings and the ensuing description.

SUMMARY OF THE INVENTION

The apparatus of the invention comprises an angled endgate assembly adapted to produce an edge on an asphalt mat. The preferred angled endgate assembly comprises a frame that is adapted to be attached to an item of asphalt paving equipment. The preferred angled endgate assembly also comprises an edger assembly that is attached to the frame and has an asphalt contacting surface. The preferred asphalt contacting surface tapers from a minimal compaction portion to a maximum compaction portion. The preferred angled endgate further comprises a means for moving the edger assembly relative to the frame.

The method of the invention comprises providing an angled endgate assembly adapted to produce an edge on an asphalt mat. The preferred angled endgate assembly comprises a frame that is adapted to be attached to an item of asphalt paving equipment. The preferred angled endgate assembly also comprises an edger assembly that is attached to the frame and has an asphalt contacting surface. The preferred asphalt contacting surface tapers from a minimal compaction portion to a maximum compaction portion. The preferred angled endgate further comprises a means for moving the edger assembly relative to the frame. The method also comprises compacting the edge of the asphalt mat.

BRIEF DESCRIPTION OF THE DRAWINGS

The presently preferred embodiments of the invention are illustrated in the accompanying drawings, in which like reference numerals represent like parts throughout, and in which:

FIG. **1** is a perspective view of the preferred embodiment of the angled endgate assembly on an exemplary screed assembly in accordance with the present invention.

FIG. **2** is a right side view of the preferred angled endgate assembly illustrated in FIG. **1**.

FIG. **3** is a left side view of the preferred angled endgate assembly illustrated in FIGS. **1** and **2**.

FIG. **4** is a front view of the preferred angled endgate assembly illustrated in FIGS. **1-3**.

FIG. **5** is a front view of a first alternative embodiment of the angled endgate assembly with the edger assembly in an angled position in accordance with the present invention.

FIG. **6** is a right side view of the first alternative embodiment of the angled endgate assembly illustrated in FIG. **5**.

FIG. **7** is a sectional right side view of the first alternative embodiment of the angled endgate assembly taken along line A-A in FIG. **5**.

FIG. **8** is a sectional right side view of the first alternative embodiment of the angled endgate assembly taken along line B-B in FIG. **5**.

FIG. **9** is a rear view of the first alternative embodiment of the angled endgate assembly illustrated in FIGS. **5** through **8**.

FIG. **10** is a right side view of the first alternative embodiment of the angled endgate assembly illustrated in FIGS. **5** through **9**.

FIG. **11** is a front view of the first alternative embodiment of the angled endgate assembly illustrated in FIGS. **5** through **10** with the edger assembly in a normal position.

FIG. **12** is a right side view of the first alternative embodiment of the angled endgate assembly illustrated in FIG. **11**.

FIG. **13** is a rear view of the first alternative embodiment of the angled endgate assembly illustrated in FIGS. **5** through **13**.

FIG. **14** is a right side view of the first alternative embodiment of the angled endgate assembly illustrated in FIG. **13**.

FIG. **15** is a partial sectional front view of a second alternative embodiment of the angled endgate assembly in accordance with the present invention.

FIG. **16** is a left side view of the second alternative embodiment of the angled endgate assembly illustrated in FIG. **15**.

DESCRIPTION OF THE PREFERRED EMBODIMENTS OF THE INVENTION

Referring now to the drawings, the preferred embodiments of the angled endgate assembly in accordance with the present invention are illustrated by FIGS. **1** through **16**. As shown in FIGS. **1-16**, the preferred embodiments of the angled endgate assembly are adapted to provide an angled outer edge to an asphalt mat. The preferred embodiments of the invention claimed herein also provide an apparatus and method for an angled endgate assembly that may be integrated into a screed assembly. The preferred embodiments of the invention claimed herein further provide an apparatus and method for an angled endgate assembly that is adjustable (by mechanical jack, linear actuator, cylinder and/or the like) while in operation and spring-loaded. Still further, the preferred embodiments of the invention claimed herein provide an apparatus and method for an angled endgate assembly having a heating element. In addition, the preferred embodiments of the invention claimed herein provide an apparatus and method for an angled endgate assembly that sufficiently compacts the edge of an asphalt mat without requiring subsequent compaction. The preferred embodiments of the invention claimed herein also provide an apparatus and method for an angled endgate assembly that is provided outside or beyond the width of the screed plate of a screed assembly such that the screed plate does not alter the edge produced by the angled endgate assembly.

Referring now to FIG. **1**, a perspective view of the preferred embodiment of the angled endgate assembly on an exemplary screed assembly is illustrated. As shown in FIG. **1**, the preferred angled endgate assembly is designated generally by reference numeral **20**. Preferred angled endgate **20** is adapted to produce an edge on an asphalt mat. Preferred angled endgate **20** comprises frame **22** which is adapted to be attached to an item of asphalt paving equipment such as screed assembly **24**. The preferred frame **22** is adapted to be removably attached and moved relative to an item of asphalt paving equipment such as screed assembly **24**.

Still referring to FIG. **1**, preferred angled endgate assembly **20** also includes edger assembly **26** which is attached to frame **22** and has asphalt contacting surface **28**. The preferred the edger assembly **26** is pivotally attached to frame **22**. Preferred asphalt contacting surface **28** tapers from a minimal compaction portion **30** to a maximum compaction portion **32** and extends along substantially the entire length of angled endgate assembly. See also FIG. **9**. The preferred minimal compaction portion **30** of asphalt contacting surface **28** is disposed in forward position **34** of the angled endgate assembly and maximum compaction portion **32** of the asphalt contacting surface is disposed in rearward position **36** of the angled endgate assembly. See also FIG. **9**.

Still referring to FIG. **1**, preferred angled endgate assembly **20** further includes a means for moving edger assembly **26** relative to frame **22** such as mechanical jack **40**. As shown in FIG. **1**, preferred mechanical jack **40** has adjusted edger assembly **26** so as to produce a 30° sloped asphalt mat edge **41**. While mechanical jack **40** is the preferred means for moving edger assembly **26** relative to frame **22**, it is contemplated within the scope of the invention that the means for moving the edger assembly relative to the frame may be an actuator such as a linear actuator.

Still referring to FIG. **1**, preferred angled endgate assembly **20** also includes pivoting assembly **42**. Preferred pivoting assembly **42** includes first plate **44** having pin **46** (see FIG. **2**) and second plate **48** having slot **50**. Preferred first plate **44** of pivoting assembly **42** is attached to frame **22** and preferred second plate **48** of the pivoting assembly is attached to edger assembly **26**.

Still referring to FIG. **1**, preferred angled endgate assembly **20** is disposed outside or slightly beyond lateral edge **52** of screed plate **54** on screed assembly **24**. More particularly, preferred asphalt contacting surface **28** is disposed outside of lateral edge **52** of screed plate **54**. As a result, the edge produced by preferred angled endgate assembly **20** is not contacted by any part of screed assembly **24**, including screed plate **54**, after the edge is shaped and compacted by the angled endgate assembly.

Referring now to FIG. **2**, a right side view of preferred angled endgate assembly **20** is illustrated. As shown in FIG. **2**, preferred angled endgate assembly **20** includes frame **22** which is attached to screed assembly **24**. Preferred edger assembly **26** is adjusted relative to frame **22** so as to produce a 30° sloped edge on an asphalt mat. It is contemplated within the scope of the invention, however, that the preferred embodiments of the angled endgate assembly described and claimed herein may be adjusted to any suitable angle for an edge on an asphalt mat. As also shown in FIG. **2**, minimum compaction portion **30** of asphalt contacting surface **28** is disposed in forward position **34** of angled endgate assembly **20** and maximum compaction portion **32** of the asphalt contacting surface is disposed in rearward position **36** of the angled endgate assembly. The preferred angled endgate assembly **20** also includes mechanical jack **40**, pivoting assembly **42**, first plate **44**, pin **46**, second plate **48** and slot **50**.

Referring now to FIG. **3**, a left side view of preferred angled endgate assembly **20** is illustrated. As shown in FIG. **3**, preferred angled endgate assembly **20** includes frame **22**, edger assembly **26**, asphalt contacting surface **28**, maximum compaction portion **32**, mechanical jack **40**, pivoting assembly **42**, first plate **44**, pin **46**, second plate **48** and slot **50**.

Referring now to FIG. **4**, a front view of preferred angled endgate assembly **20** is illustrated. As shown in FIG. **4**, preferred angled endgate assembly **20** comprises frame **22**, edger assembly **26**, forward position **34**, rearward position **36**, mechanical jack **40** and pivoting assembly **42**.

Referring now to FIG. **5**, a front view of a first alternative embodiment of the angled endgate assembly with the edger assembly in an angled position is illustrated. As shown in FIG. **5**, the preferred angled endgate assembly is designated

generally by reference numeral **120**. Preferred angled endgate assembly **120** includes frame **122** which is adapted to be removably attached and moved relative to an item of asphalt paving equipment. Preferred angled endgate assembly **120** also includes edger assembly **126** which is pivotally attached to frame **122** and has asphalt contacting surface **128** (see FIG. **6**). The preferred angled endgate assembly **120** has forward position **134** and rearward position **136**. Preferred angled endgate assembly **20** further includes a means for moving edger assembly **126** relative to frame **122** such as mechanical jack **140**. Preferred angled endgate assembly **120** also includes pivoting assembly **142**.

Referring now to FIG. **6**, a right side view of preferred angled endgate assembly **120** is illustrated. As shown in FIG. **6**, preferred angled endgate assembly **120** includes frame **122**, edger assembly **126** and asphalt contacting surface **128**. As also shown in FIG. **2**, preferred minimum compaction portion **130** of asphalt contacting surface **128** is disposed in forward position **134** of angled endgate assembly **120** and maximum compaction portion **132** of the asphalt contacting surface is disposed in rearward position **136** of the angled endgate assembly. The preferred angled endgate assembly **120** also includes mechanical jack **140** and pivoting assembly **142**.

Referring now to FIG. **7**, a sectional right side view of preferred angled endgate assembly **120** taken along line A-A in FIG. **5** is illustrated. As shown in FIG. **7**, preferred maximum compaction portion **132** of asphalt contacting surface **128** extends along a portion of the length of the angled endgate assembly.

Referring now to FIG. **8**, a sectional right side view of preferred angled endgate assembly **120** taken along line B-B in FIG. **5** is illustrated. As shown in FIG. **8**, preferred asphalt contacting surface **128** tapers from minimum compaction portion **130** in forward position **134** of angled endgate assembly **120** to maximum compaction portion **132** in rearward position **136** of the angled endgate assembly.

Referring now to FIG. **9**, a rear view of preferred angled endgate assembly **120** is illustrated. As shown in FIG. **9**, preferred maximum compaction portion **132** of asphalt contacting surface **128** extends along a portion of the length of the angled endgate assembly. As also shown in FIG. **9**, preferred asphalt contacting surface **128** tapers from minimum compaction portion **130** in forward position **134** of angled endgate assembly **120** to maximum compaction portion **132** in rearward position **136** of the angled endgate assembly.

Referring now to FIG. **10**, a right side view (relative to FIG. **9**) of preferred angled endgate assembly **120** is illustrated. As shown in FIG. **10**, preferred asphalt contacting surface **128** tapers from minimum compaction portion **130** in forward position **134** of angled endgate assembly **120** to maximum compaction portion **132** in rearward position **136** of the angled endgate assembly.

Referring now to FIG. **11**, a front view of preferred angled endgate assembly **120** is illustrated with edger assembly **126** in a normal position. As shown in FIG. **11**, preferred edger assembly **126** is adapted to be moved relative to frame **122**. When preferred edger assembly **126** is in the illustrated position, angled endgate assembly **120** is adapted to produce an asphalt mat edge that is perpendicular to the vehicle and/or human contacting surface.

Referring now to FIG. **12**, a right side view of preferred angled endgate assembly **120** is illustrated. As shown in FIG. **12**, preferred edger assembly **126** is adapted to pivotally move relative to frame **122** at pivot point **160**. As also shown in FIG. **12**, preferred asphalt contacting surface **128** tapers from minimum compaction portion **130** in forward position **134** of angled endgate assembly **120** to maximum compaction portion **132** in rearward position **136** of the angled endgate assembly.

Referring now to FIG. **13**, a rear view of preferred angled endgate **120** is illustrated. As shown in FIG. **13**, when preferred angled endgate assembly **120** is in the normal position it is adapted to produce an asphalt mat edge that is perpendicular to the vehicle and/or human contacting surface.

Referring now to FIG. **14**, a right side view (relative to FIG. **13**) of preferred angled endgate **120** is illustrated. As shown in FIG. **14**, preferred asphalt contacting surface **128** tapers from minimum compaction portion **130** in forward position **134** of angled endgate assembly **120** to maximum compaction portion **132** in rearward position **136** of the angled endgate assembly.

Referring now to FIG. **15**, a partial sectional front view of a second alternative embodiment of the angled endgate assembly is illustrated. As shown in FIG. **15**, the preferred angled endgate assembly is designated generally by reference numeral **220**. Preferred angled endgate assembly **220** comprises frame **222** and edger assembly **226**. Preferred edger assembly includes shelf **227** and heating element **229**. Preferred shelf **227** supports heating element **229** and provides structural support to asphalt contacting surface **228**. Preferred heating element **229** is adapted to provide heat to asphalt contacting surface **228** to improve compaction of the asphalt mat edge. Preferred angled endgate **220** also comprises springs **231**. Preferred springs **231** are adapted to improve compaction of the asphalt mat edge.

Referring now to FIG. **16**, a left side view of preferred angled endgate assembly **220** is illustrated. As shown in FIG. **16**, preferred angled endgate assembly **220** includes shelf **227**, heating element **229** and spring **231**.

The invention also comprises a method for producing an edge on an asphalt mat. The preferred method comprises providing an angled endgate assembly adapted to produce an edge on an asphalt mat. The preferred endgate assembly comprises a frame that is adapted to be attached to an item of asphalt paving equipment. The preferred endgate assembly also comprises an edger assembly that is attached to the frame and has an asphalt contacting surface. The preferred asphalt contacting surface tapers from a minimal compaction portion to a maximum compaction portion. The preferred endgate further comprises a means for moving the edger assembly relative to the frame. The preferred method also comprises compacting the edge of the asphalt mat.

In a first alternative embodiment of the method of the invention described and claimed herein, the method also comprises moving the edger assembly relative to the frame. In another alternative embodiment of the method of the invention described and claimed herein, the method further comprises moving the frame relative to the item of asphalt paving equipment. In still another alternative embodiment of the method of the invention described and claimed herein, the method further comprises moving the item of asphalt paving equipment.

In operation, several advantages of the preferred embodiments of the invention are achieved. For example, the preferred embodiments of the angled endgate assembly are adapted to provide an angled outer edge to an asphalt mat. The preferred embodiments of the invention claimed herein also provide an apparatus and method for an angled endgate assembly that may be integrated into a screed assembly. The preferred embodiments of the invention claimed herein further provide an apparatus and method for an angled endgate assembly that is adjustable (by mechanical jack, linear actuator, cylinder and/or the like) while in operation and spring-

loaded. Still further, the preferred embodiments of the invention claimed herein provide an apparatus and method for an angled endgate assembly having a heating element. In addition, the preferred embodiments of the invention claimed herein provide an apparatus and method for an angled endgate assembly that sufficiently compacts the edge of an asphalt mat without requiring subsequent compaction. The preferred embodiments of the invention claimed herein also provide an apparatus and method for an angled endgate assembly that is provided outside of the screed plate of a screed assembly such that the screed plate will not alter the edge produced by the angled endgate assembly.

Although this description contains many specifics, these should not be construed as limiting the scope of the invention but as merely providing illustrations of some of the presently preferred embodiments thereof, as well as the best mode contemplated by the inventors of carrying out the invention. The invention, as described herein, is susceptible to various modifications and adaptations, and the same are intended to be comprehended within the meaning and range of equivalents of the appended claims.

What is claimed is:

1. An angled endgate assembly adapted to produce an angled edge on an asphalt mat, said angled endgate assembly comprising:

(a) a frame, said frame being adapted to be attached to an item of asphalt paving equipment;

(b) an edger assembly, said edger assembly being attached to the frame and having an asphalt contacting surface adapted to produce an angled edge;

(c) a means for moving the edger assembly relative to the frame;

wherein the asphalt contacting surface has a smaller surface area in a minimal compaction portion disposed at a forward position of the item of asphalt paving equipment and a larger surface area in a maximum compaction portion disposed at a rearward portion of the item of asphalt paving equipment.

2. The angled endgate assembly of claim **1** wherein the frame is adapted to be removably attached to the item of asphalt paving equipment.

3. The angled endgate assembly of claim **1** wherein the frame is adapted to be moved relative to the item of asphalt paving equipment.

4. The angled endgate assembly of claim **1** wherein the edger assembly is pivotally attached to the frame.

5. The angled endgate assembly of claim **1** wherein the asphalt contacting surface extends along substantially the entire length of angled endgate assembly.

6. The angled endgate assembly of claim **1** wherein the minimal compaction portion of the asphalt contacting surface is disposed in a forward position of the angled endgate assembly.

7. The angled endgate assembly of claim **1** wherein the maximum compaction portion of the asphalt contacting surface is disposed in a rearward position of the angled endgate assembly.

8. The angled endgate assembly of claim **1** wherein the maximum compaction portion of the asphalt contacting surface extends along a portion of the length of the angled endgate assembly.

9. The angled endgate assembly of claim **1** wherein the means for moving the edger assembly relative to the frame is an actuator.

10. The angled endgate assembly of claim **1** wherein the means for moving the edger assembly relative to the frame is a linear actuator.

11. The angled endgate assembly of claim **1** wherein the means for moving the edger assembly relative to the frame is a mechanical jack.

12. The angled endgate assembly of claim **1** further comprising a pivoting assembly.

13. The angled endgate assembly of claim **1** wherein the angled endgate assembly is adapted for use on a screed assembly, said screed assembly including a screed plate having a lateral edge.

14. The angled endgate assembly of claim **13** wherein the angled endgate assembly is disposed outside the lateral edge of the screed plate on the screed assembly.

15. The angled endgate assembly of claim **13** wherein the asphalt contacting surface is disposed outside the lateral edge of the screed plate on the screed assembly.

16. An angled endgate assembly adapted for use on a screed assembly having a screed plate in order to produce an angled edge on an asphalt mat, said angled endgate assembly comprising:

(a) a frame, said frame being removably attached to a screed and movable relative to the screed;

(b) an edger assembly, said edger assembly being pivotally attached to the frame, having an asphalt contacting surface which extends along substantially the entire length of the angled endgate assembly and is adapted to produce an angled edge, and having a heating element;

(c) a mechanical jack, said mechanical jack being adapted to move the edger assembly relative to the frame;

(d) a pivoting assembly, said pivoting assembly comprising a first plate having a pin and being attached to the frame and a second plate having a slot and being attached to the edger assembly;

wherein the asphalt contacting surface tapers from a minimal compaction portion at a forward position of the screed to a maximum compaction portion at a rearward position of the screed; and wherein the maximum compaction portion of the asphalt contacting surface extends along a portion of the length of the angled endgate assembly; and wherein the angled endgate assembly is disposed outside of the screed plate of the screed assembly; and wherein the angled endgate assembly is spring-loaded.

17. A method for producing an edge on an asphalt mat, said method comprising:

(a) providing an angled endgate assembly adapted to produce an angled edge on an asphalt mat, said angled endgate assembly comprising:

(1) a frame, said frame being adapted to be attached to an item of asphalt paving equipment;

(2) an edger assembly, said edger assembly being attached to the frame and having an asphalt contacting surface and adapted to produce an angled edge;

(3) a means for moving the edger assembly relative to the frame; wherein the asphalt contacting surface has a smaller surface area in a minimal compaction portion disposed at a forward position of the item of asphalt paving equipment and a larger surface area in a maximum compaction portion disposed at a rearward portion of the item of asphalt paving equipment;

(b) compacting the edge of the asphalt mat.

18. The method for producing an edge on an asphalt mat of claim **17** further comprising:

(c) moving the edger assembly relative to the frame.

19. The method for producing an edge on an asphalt mat of claim **17** further comprising:

(c) moving the frame relative to the item of asphalt paving equipment.

20. The method for producing an edge on an asphalt mat of claim **17** further comprising:

(c) moving the item of asphalt paving equipment.

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